

# Nuclear Material Stabilization and Disposition (RL-0011)

D. B. Klos, Vice President of  
Plutonium Finishing Plant Closure Project/  
(509) 373-3574



241-Z D7 Entry



## Overview

This section addresses work in Project Baseline Summary RL-0011, *Nuclear Material Stabilization and Disposition*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of July 2005.

## Notable Accomplishments

### Disposition the Plutonium Finishing Plant (PFP) Facility

**Waste Management:** Shipped 64 solutions containers to Waste Management since the beginning of July, bringing total shipped to date to 129.

**236-Z:** Completed robotic sampling of material on the Plutonium Reclamation Facility canyon floor.

**232-Z:** RL approved a one-time request for shipping allowing the 232-Z glovebox to be shipped to T Plant on August 5, 2005, for size reduction.

**241-Z:** Characterization work for Cell D5 was completed in early July; the first entry in over 15 years was made into Cell D7.

### FY 2005 Funds vs. Spend Forecast (\$M)

	Projected FY 2005 Funding	FY 2005 Fiscal Year Spend Forecast	Variance
Nuclear Materials Stabilization & Disposition	\$ 197.1	\$ 183.7	\$ 13.5

### FY 2005 Schedule/Cost Performance (\$M)

	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
Nuclear Materials Stabilization & Disposition	\$160.5	\$142.3	\$145.0	-\$18.2	-11.3%	-\$2.7	-1.9%	\$204.9

Numbers are rounded to the nearest \$0.1M and include the closure services allocation.

## **FY 2005 Schedule/Cost Performance, continued**

**Schedule Performance (-\$18.2/-11.3%):** Primary contributors to the unfavorable schedule performance include:

- 232-Z glovebox Deactivation and Decommissioning (D&D) impacted by higher-than-anticipated volume of loose debris, requirements for process equipment removal, and decontamination of the incinerator glovebox.
- 241-Z pre-existing condition cover block issue and subsequent resolution and recovery actions.
- Design and constructability issues supporting pencil tank removal work and lack of cleared staff to support rooms 50 and 60 process equipment removal in the Plutonium Reclamation Facility.
- Delays in solid waste disposal activities and apportioned D&D project management due to overall delayed D&D activities.
- Delays in special nuclear material (SNM) de-inventory due to the new Department of Energy direction on path forward yet to be implemented in the baseline.
- Delays in 234-5Z process equipment removal due to delayed clearances and follow-on training requirements.

The above negative schedule variances are partially offset by:

- Recovery of prior-year legacy hold-up removal and lab support activities.

**Cost Performance (-\$2.7M/-1.9%):** Primary contributors to the unfavorable cost variance include:

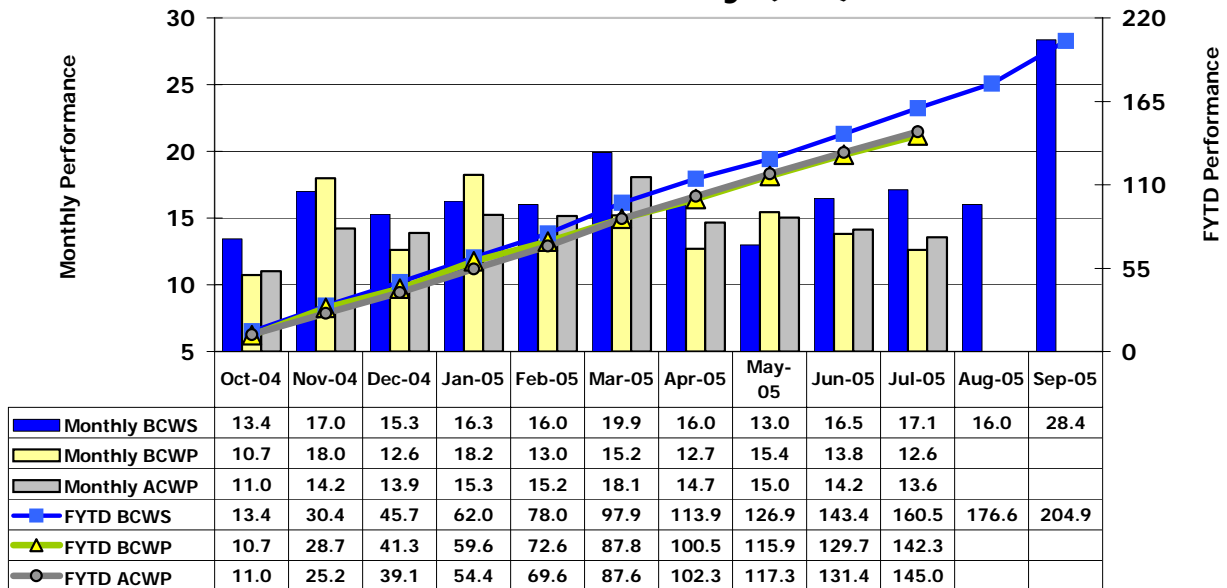
- Increased costs in 232-Z and 241-Z D&D work to support technical issue resolution and subsequent recovery actions.
- Increased costs in pencil tank removal system.
- Increased Regulatory Compliance support, and increased labor effort to complete waste storage and other facility modifications supporting D&D.
- Increased costs for occupancy, dosimetry, and severance costs, coupled with work planning initiatives.
- Unplanned costs for the Breathing Air Compressor Project.
- Higher-than-expected water tower demolition costs.

The above negative cost variances are partially offset by:

- Reduced solid waste disposal costs; efficiencies gained by using existing lab and SNM de-inventory teams to accelerate 234-5Z process equipment removal.
- Efficiencies in: (1) 242-Z entry planning, (2) Min-Safe Operations and Surveillance, and (3) Closure Services work.

## FY 2005 Schedule/Cost Performance, continued

### Performance Analysis FYTD and Monthly (\$M)



## Milestone Achievement

Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comments
TRP-05-501 TRP-05-506	Discontinue Waste Discharges from the 241-Z Tanks to Tank Farms	TPA PI	6/30/05	12/8/2004	-----	Complete
TRP-05-503	Complete Deinventory of DOE-STD-3013 Containers & Unirradiated Fuel by Shipment to SRS or Other Approved Location	PI	9/30/06		TBD	To Be Rebaselined
TRP-05-504	Remove and Disposition Pu Holdup in Process Equipment at PFP	PI	9/30/05	6/30/2005	7/31/05	Complete
TRP-05-505	Transition 10 Facilities to Slab-on-Grade	PI	9/30/05	5/22/2005	-----	Complete
TRP-06-500	Decontaminate Glovebox HA-20MB	PI	3/31/06	10/28/2004	-----	Complete
TRP-06-501	Complete 100% Legacy Pu Holdup Removal and Disposition	TPA	9/30/06	6/30/2005	7/31/05	Complete
TRP-06-507 TRP-06-502	Transition 232-Z Bldg Incinerator to Slab-on-Grade	PI TPA	3/31/06 9/30/06		4/30/06	Behind Schedule Ahead of Schedule
TRP-06-503	Remove Remaining SNM From PFP Such That Protected Area Not Required	PI	9/30/06		TBD	To Be Rebaselined
TRP-06-509	Disposition Miscellaneous PFP Nuclear Materials	PI	9/30/06		9/30/06	On Schedule
TRP-06-510	Transition 241-Z/ZA Facility to Demolition Ready	PI	9/30/06		9/30/06	On Schedule
TRP-06-511	Remove or Decontaminate 236-Z Pencil Tanks	PI	9/30/06		9/30/06	On Schedule
TRP-06-512	Remove or Decontaminate the 236-Z Process Equipment in Rooms 50 & 60	PI	9/30/06		9/30/06	On Schedule
TRP-06-513	Remove or Decontaminate the Remaining 236-Z Process Equipment	PI	9/30/06		9/30/06	On Schedule
TRP-06-514	Remove or Decontaminate 189 Gloveboxes and Hoods in 234-5Z	PI	9/30/06		9/30/06	On Schedule
TRP-06-515	Complete 242-Z Initial Entry & Characterization	PI	9/30/06		9/30/06	On Schedule
TRP-06-516	Cleanout Pu & Am Contaminated Gloveboxes and Tanks in 242-Z	PI	9/30/06		9/30/06	On Schedule
TRP-06-517	Dispose of Approximately 600 Pu Nitrate Containers at PFP	PI	9/30/06		9/30/06	On Schedule